

Growth and Development Models

Free-response/problem

1. Describe the main barriers to economic development that countries may face.
2. Evaluate the view that countries with more equal distributions of income and wealth are more likely to experience higher levels of development.

Aggregate Expenditures and the Harrod-Domar Model

DI

Consumption + Saving

APC

Consumption / Disposable Income

APS

Saving / Disposable Income

MPC

Change in Consumption

Change in Disposable Income

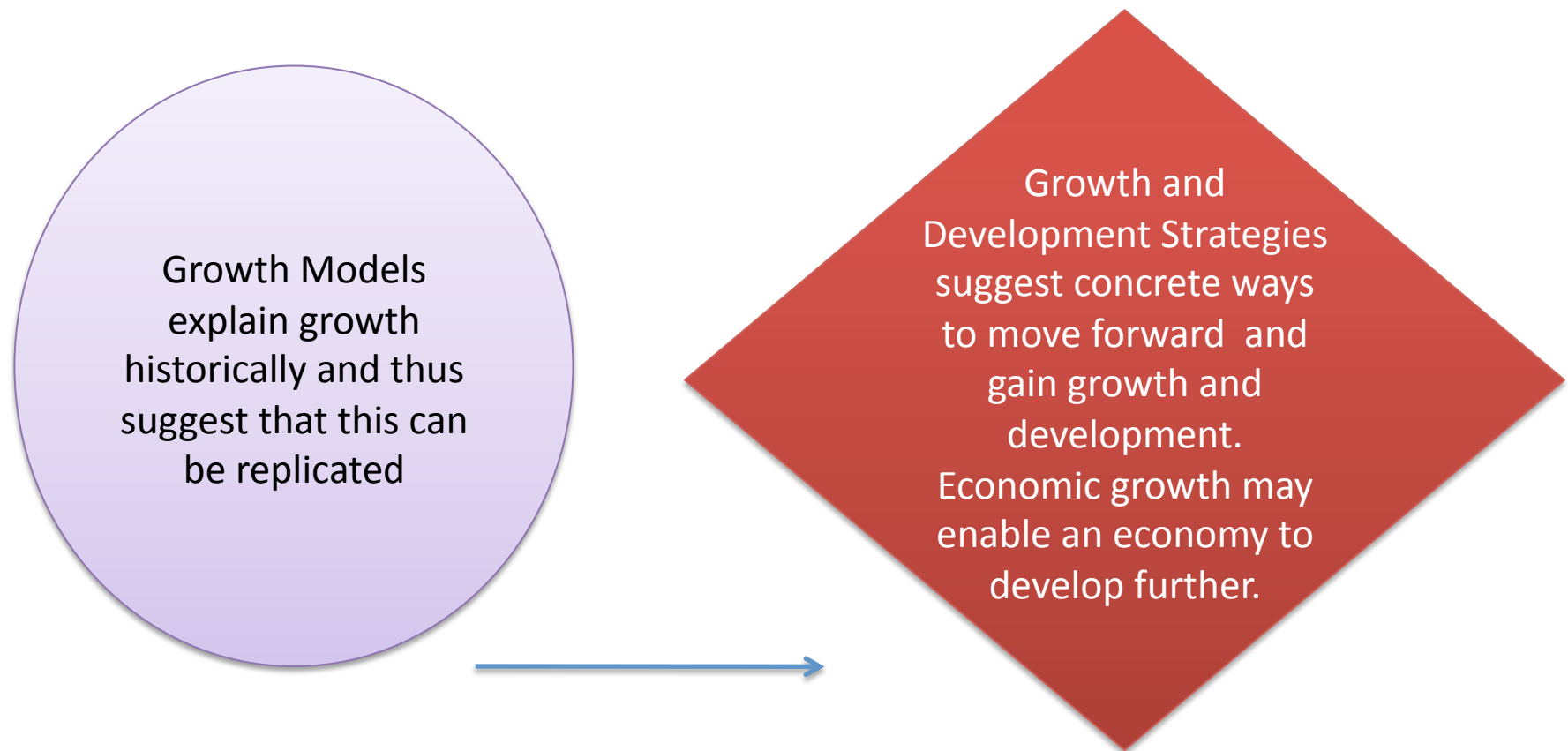
MPS

Change in Saving

Change in Disposable Income

Growth and Development Strategies

- Growth Models and Growth and Development Strategies should not be confused:



These models may exert an influence on the formulation of these strategies

Harrod-Domar Growth Model

- Assumptions: closed economy, no government sector, no depreciation

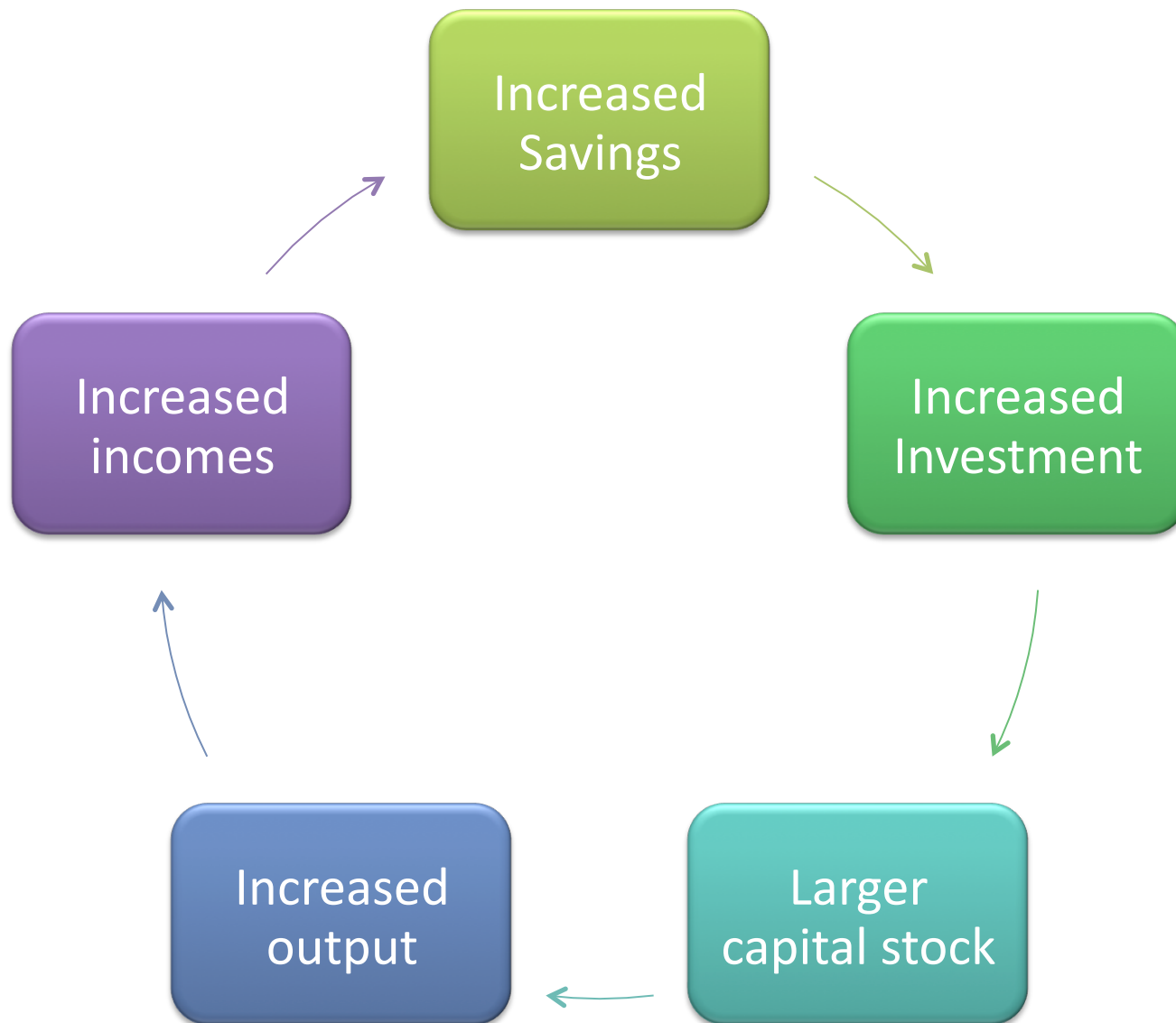


Rate of GDP growth = Saving Ratio/Capital and output ratio

Saving ratio = marginal propensity to save

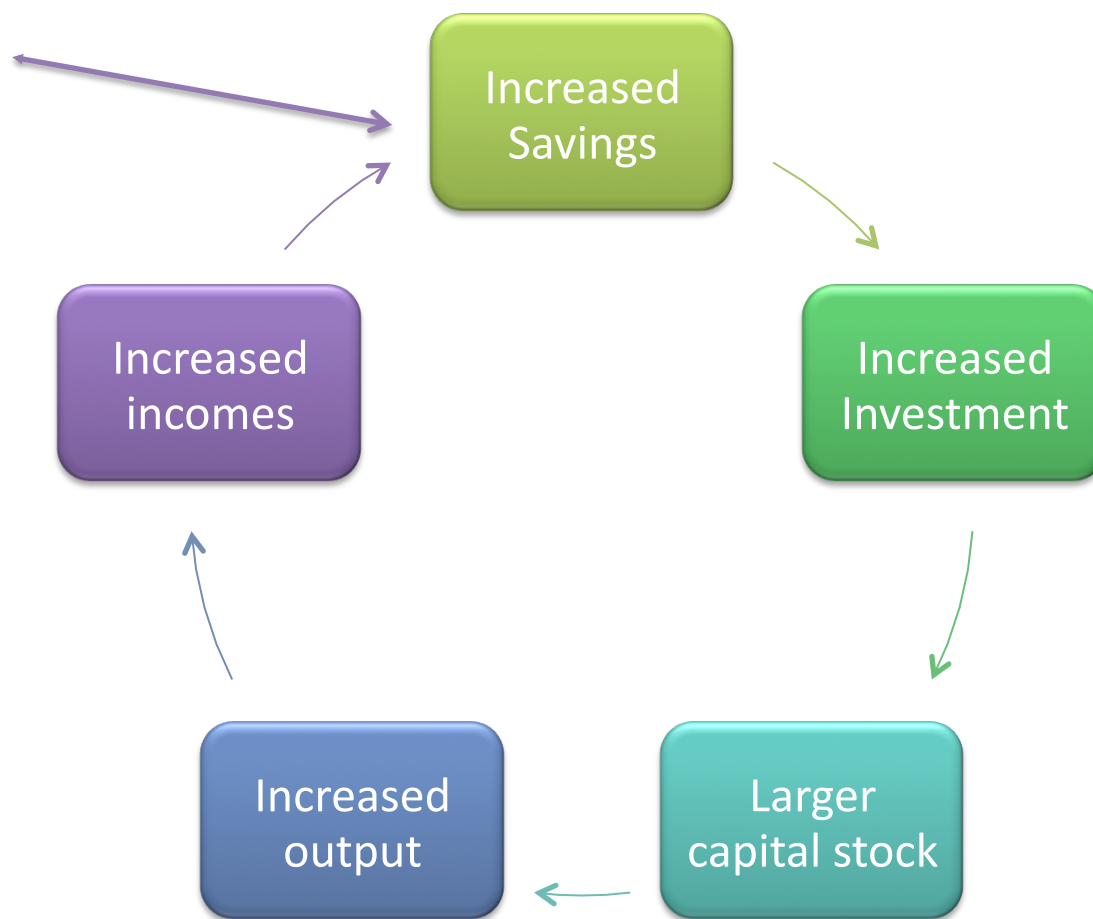
Capital and output ratio = capital expenditure: outgain gained

Harrod-Domar Growth Model



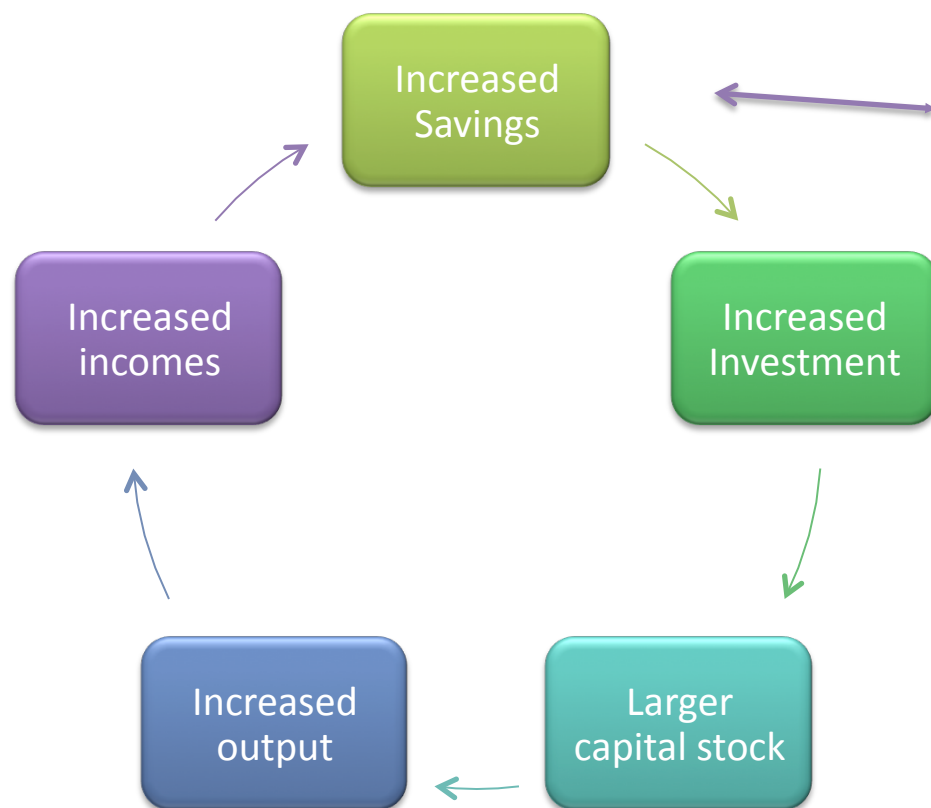
Harrod-Domar Growth Model

What are the challenges of strategies based on this model when it comes to savings?



Harrod-Domar Growth Model

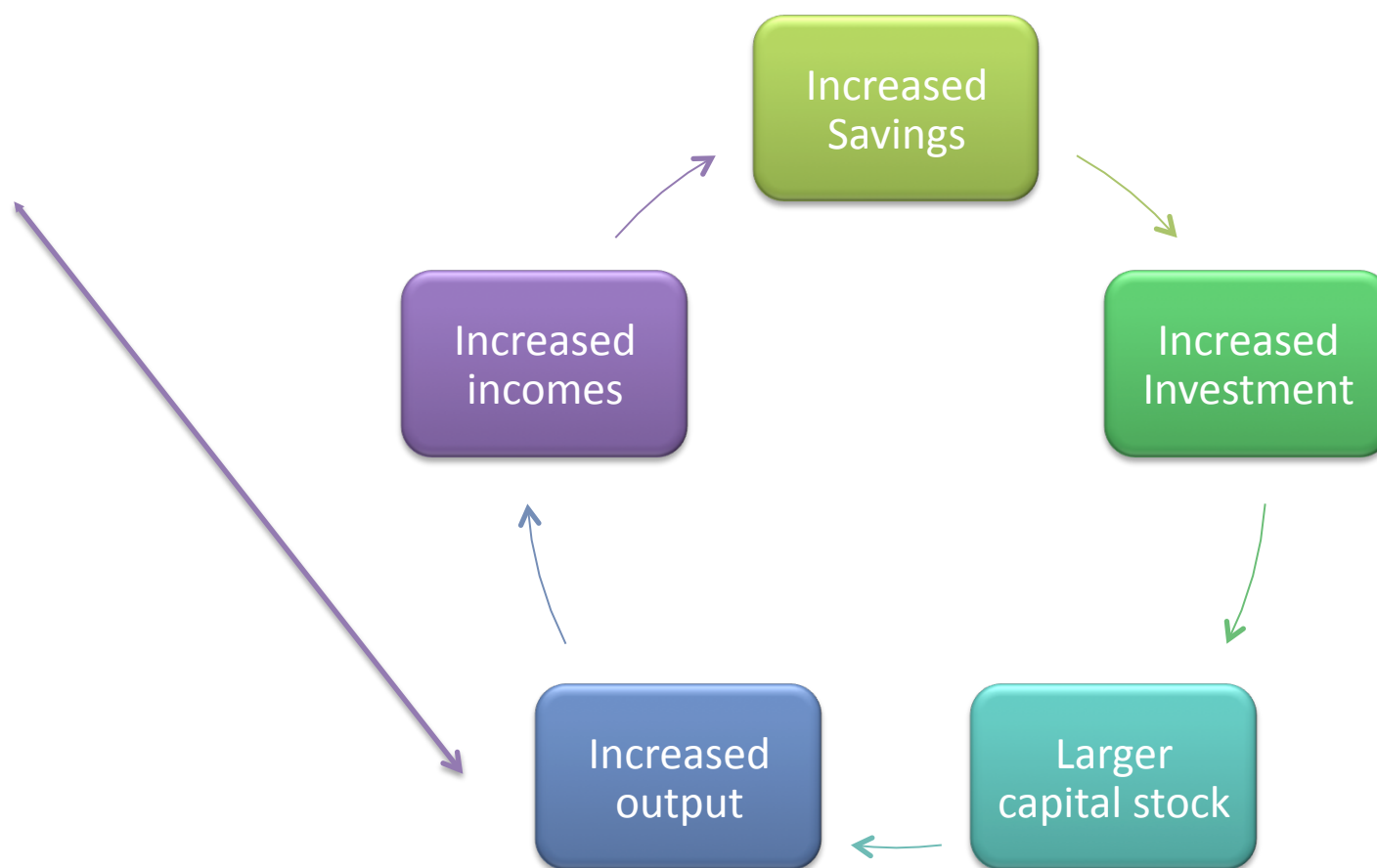
What are the challenges of strategies based on this model when it comes to savings?



1. Most developing economics have a very low propensity to save?
2. High levels of consumption and saving diverted to purchase of assets as banks seen as unreliable.
3. Savings often sent out of country in capital flight.

Harrod-Domar Growth Model

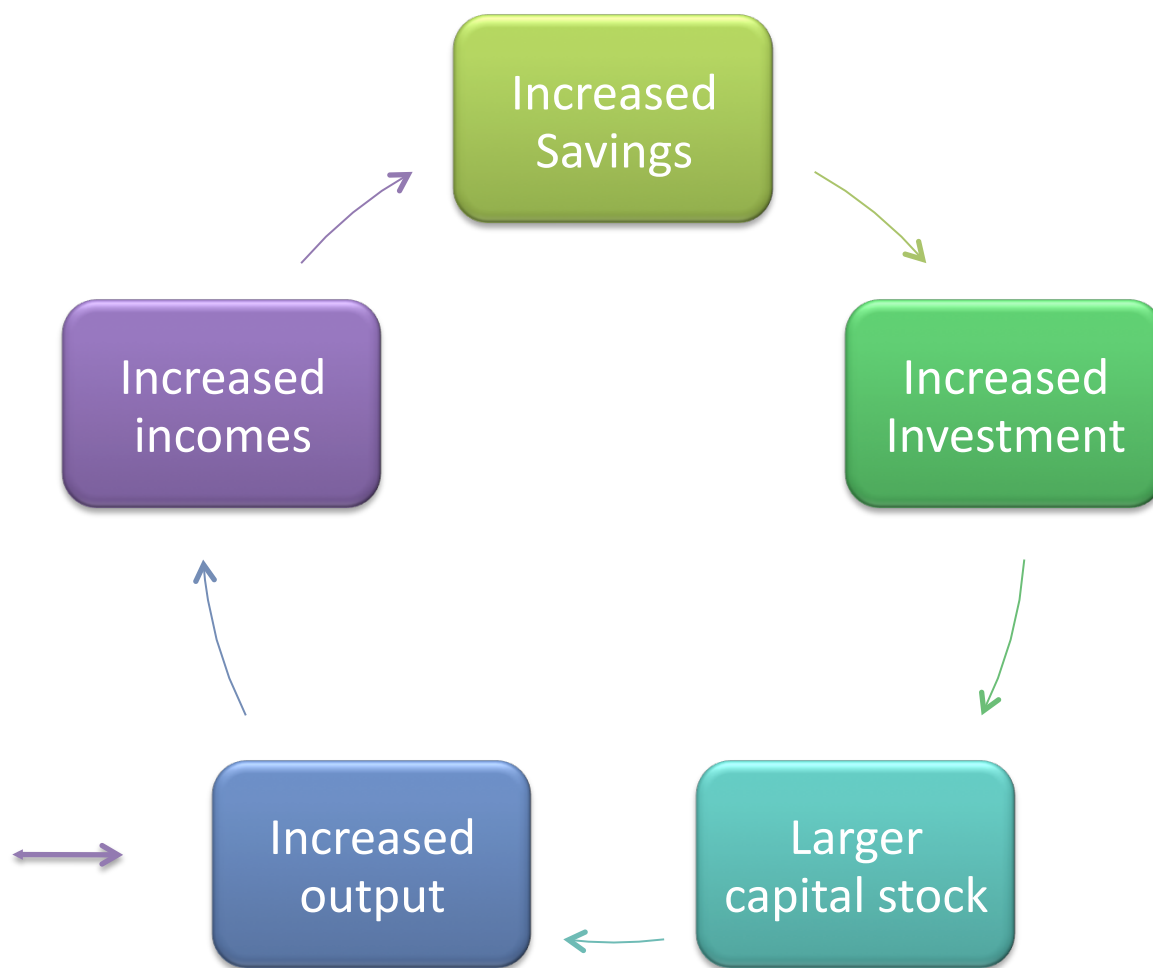
What are the challenges of strategies based on this model when it comes to improving the capital/output ratio ?



Harrod-Domar Growth Model

What are the challenges of strategies based on this model when it comes to output?

1. Increasing efficiency hampered by poorly skilled workforce and a brain drain
2. Poor management skills
3. Little R and D



Costs of Production and the structural **change and dual-sector models**

SHORT RUN AND LONG RUN

Accounting:

Short and long run *is based upon annual chronology*

Economics:

Short run *has fixed plant capacity size*

Long run *has variable plant capacity size*

SHORT-RUN PRODUCTION

Total Product (TP)

Marginal Product (MP)

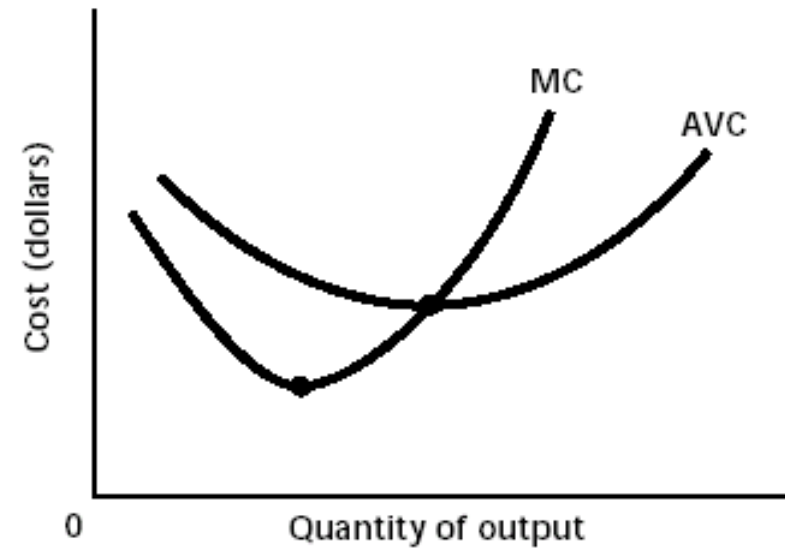
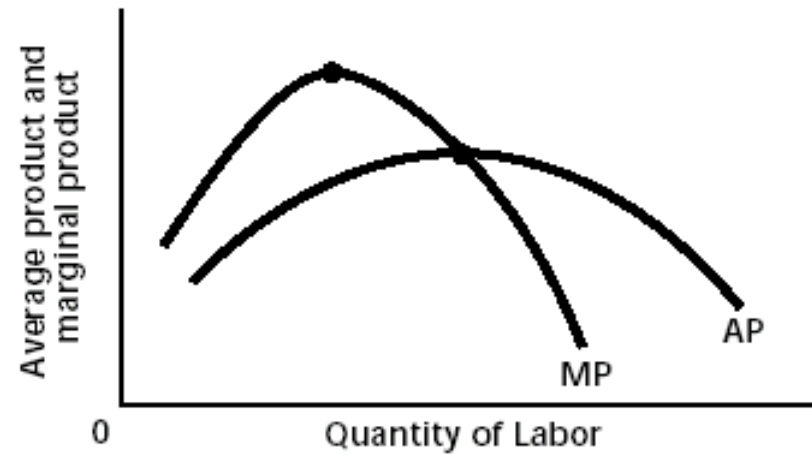
$$\text{Marginal Product} = \frac{\text{Change in Total Product}}{\text{Change in Labor Input}}$$

Average Product (AP)

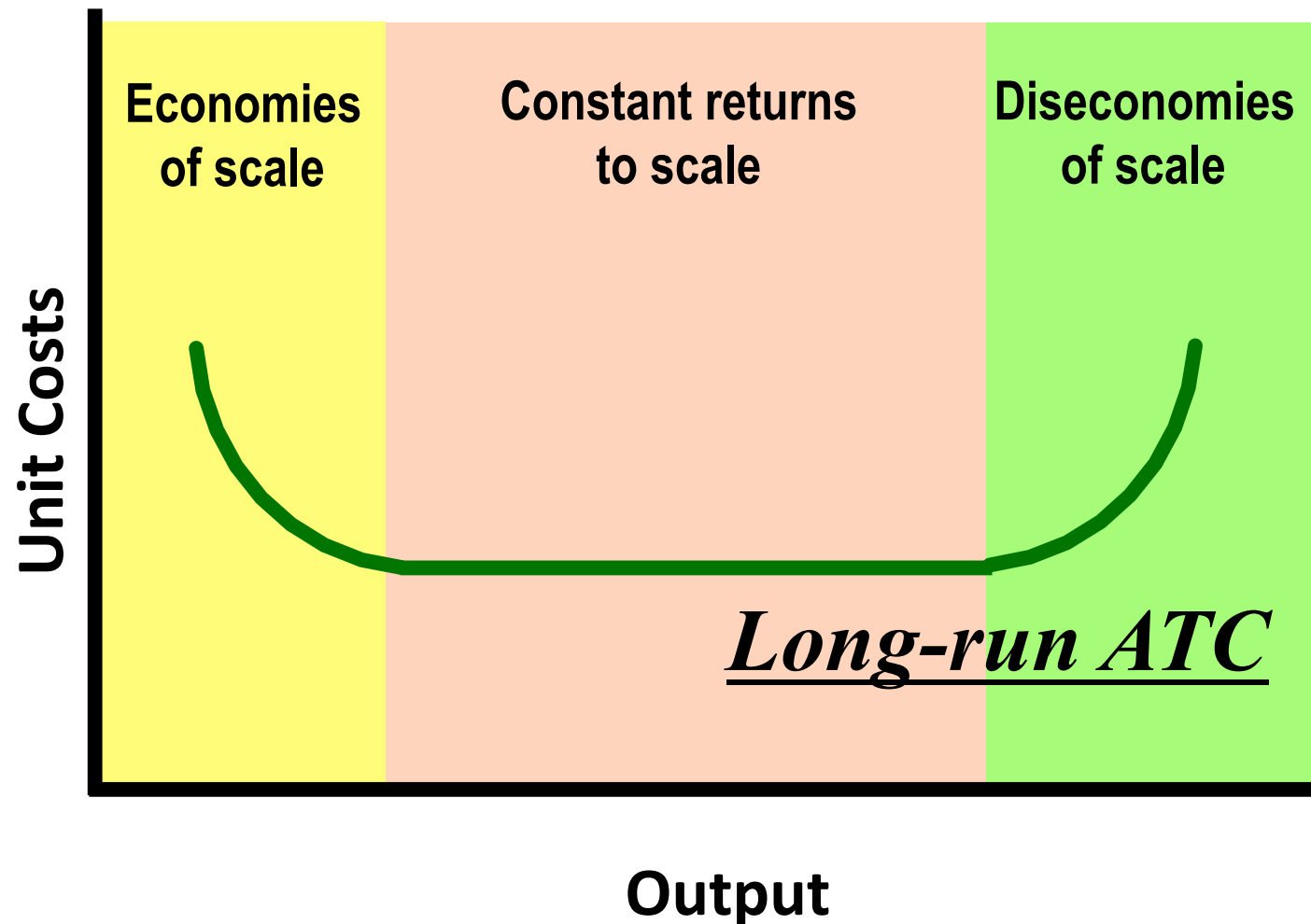
$$\text{Average Product} = \frac{\text{Total Product}}{\text{Units of Labor}}$$

Marginal Product and Marginal Cost

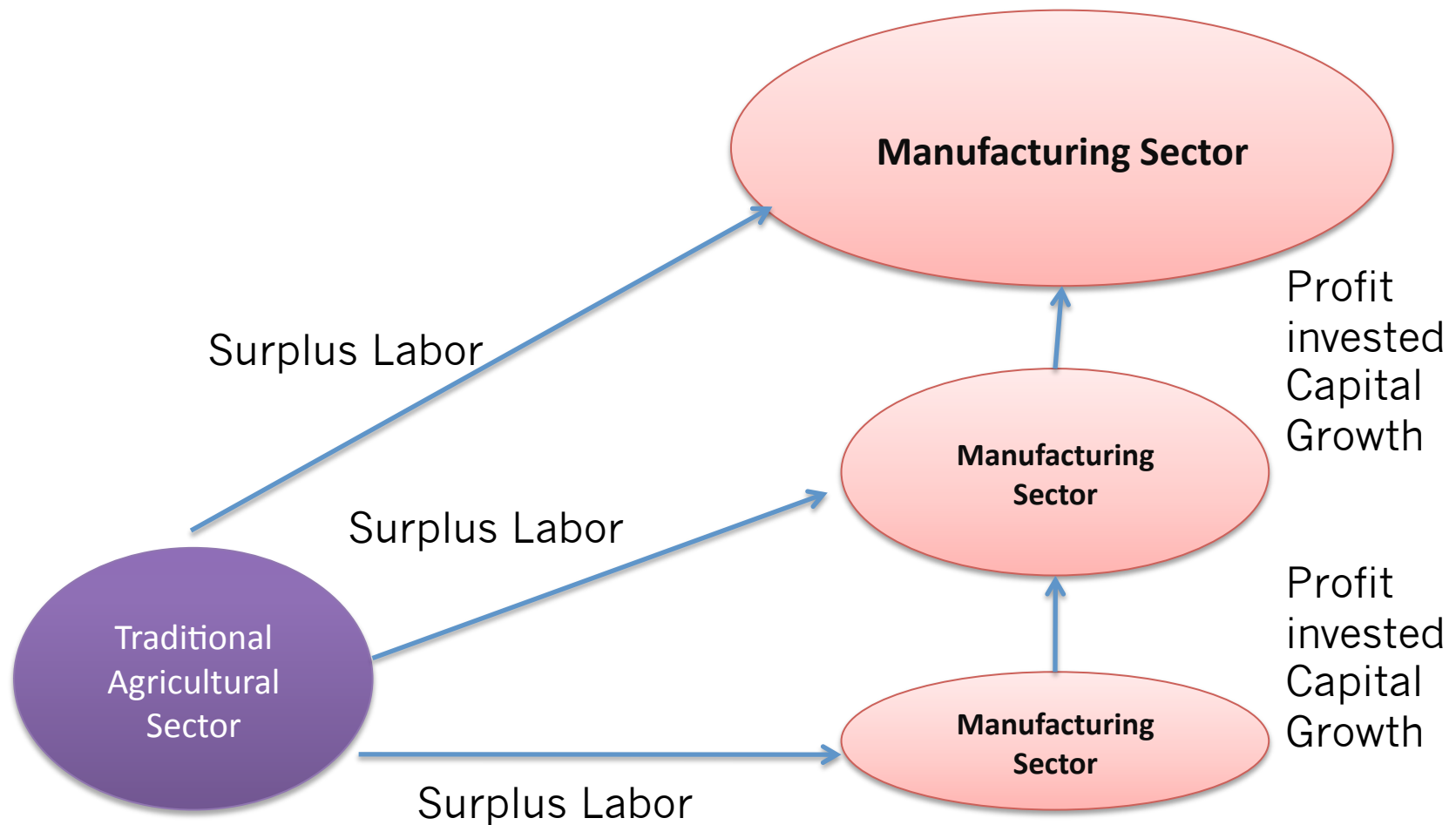
The law of
diminishing
marginal
returns



Economies and Diseconomies of Scale

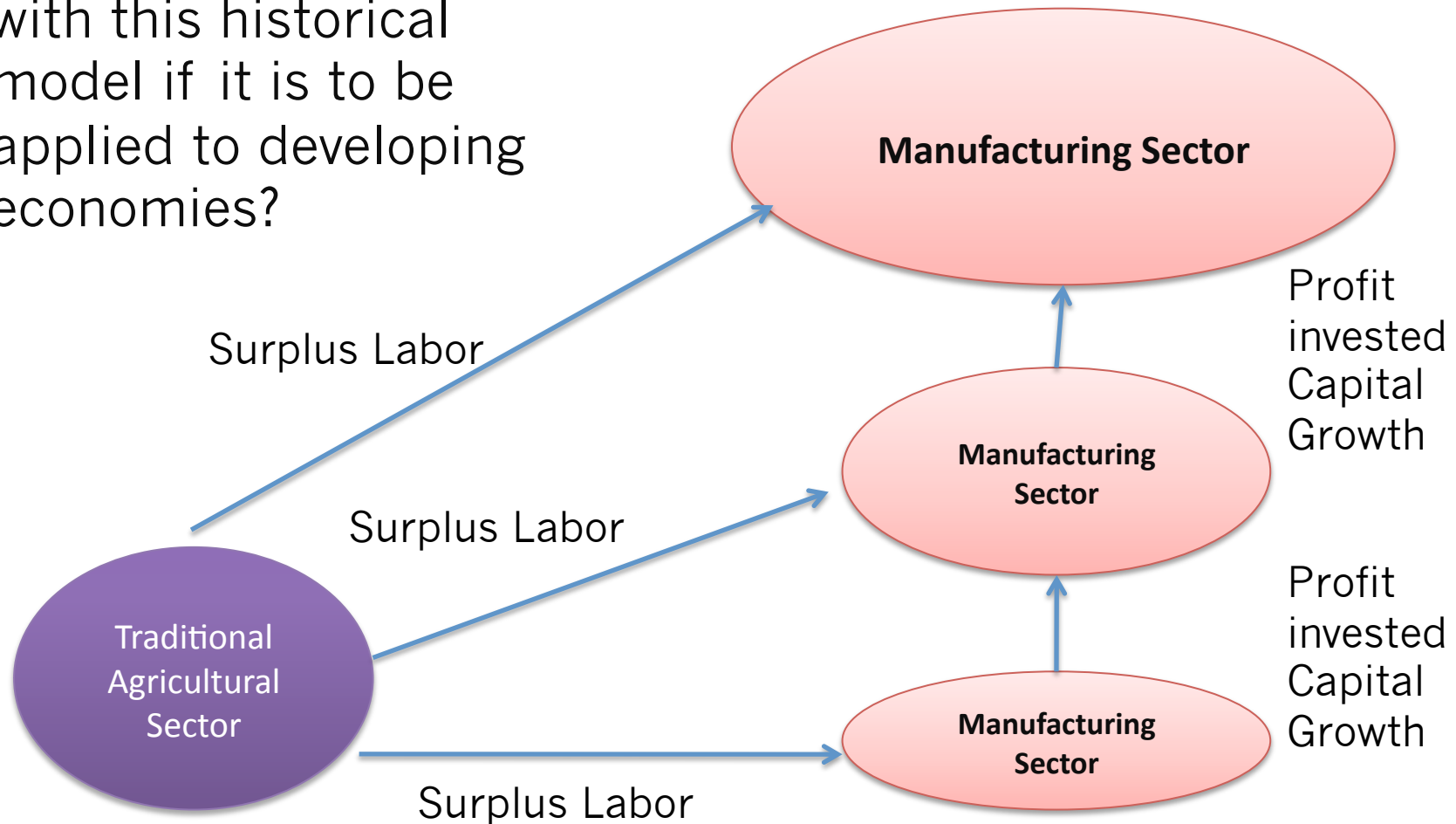


Structural Change and Dual Sector Models



Structural Change and Dual Sector Models

What are the problems with this historical model if it is to be applied to developing economies?



Problems with Structural Change and Dual Sector Models

- Shift to labor saving technology instead of using spare capacity in the agricultural sector
- Capital flight instead of investment
- Model assumes steady wage levels but wages often rise, lowering profits and investment

